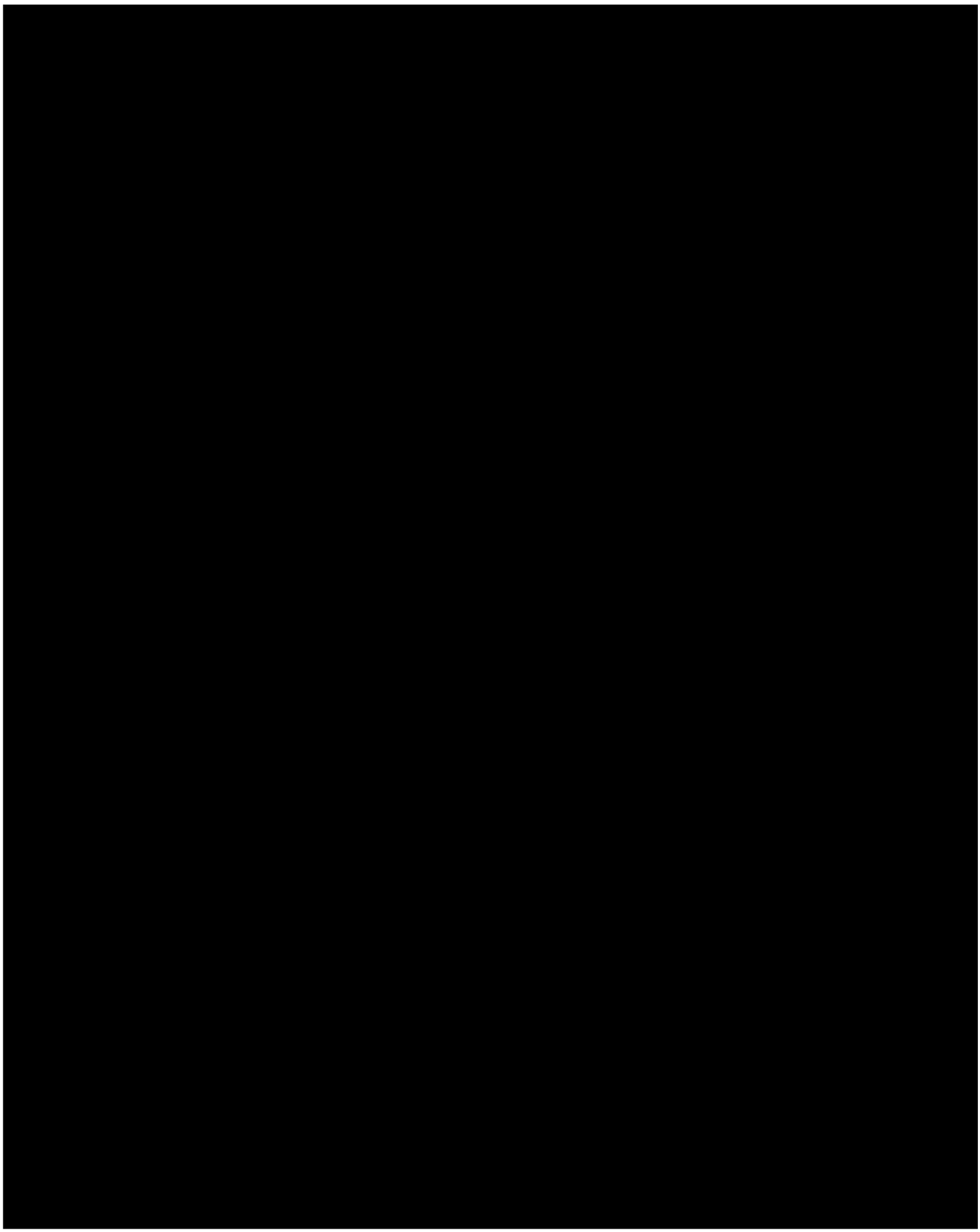
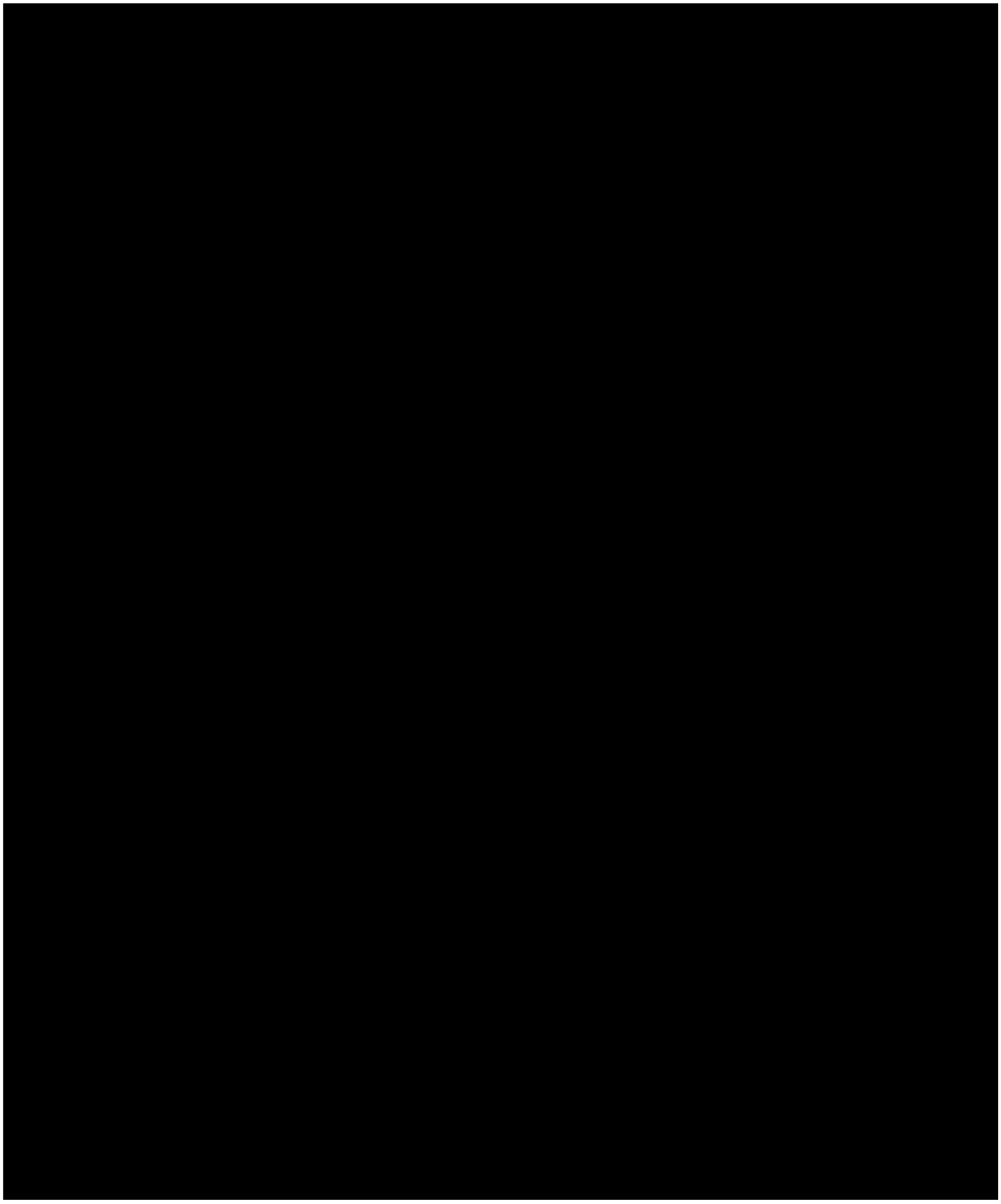
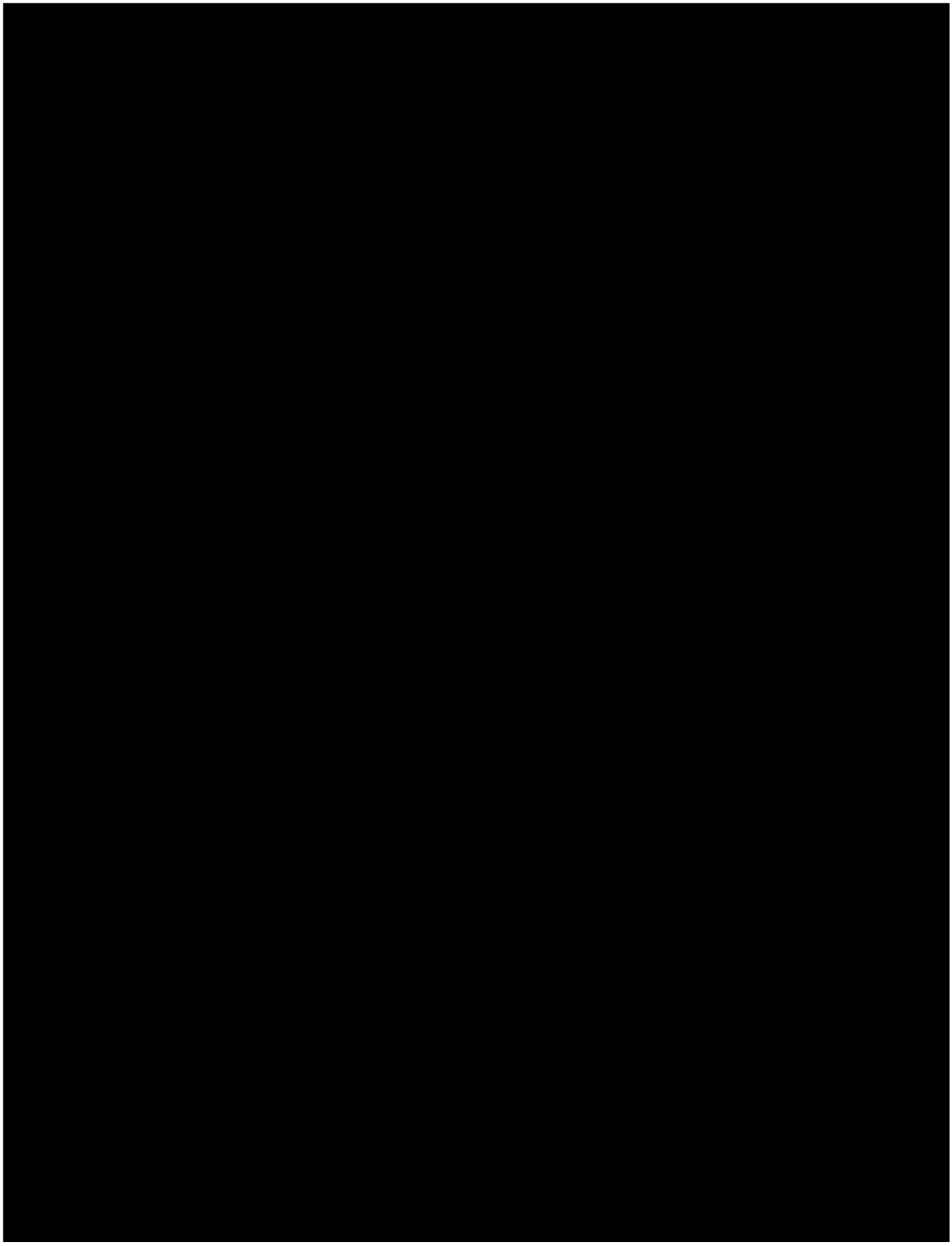
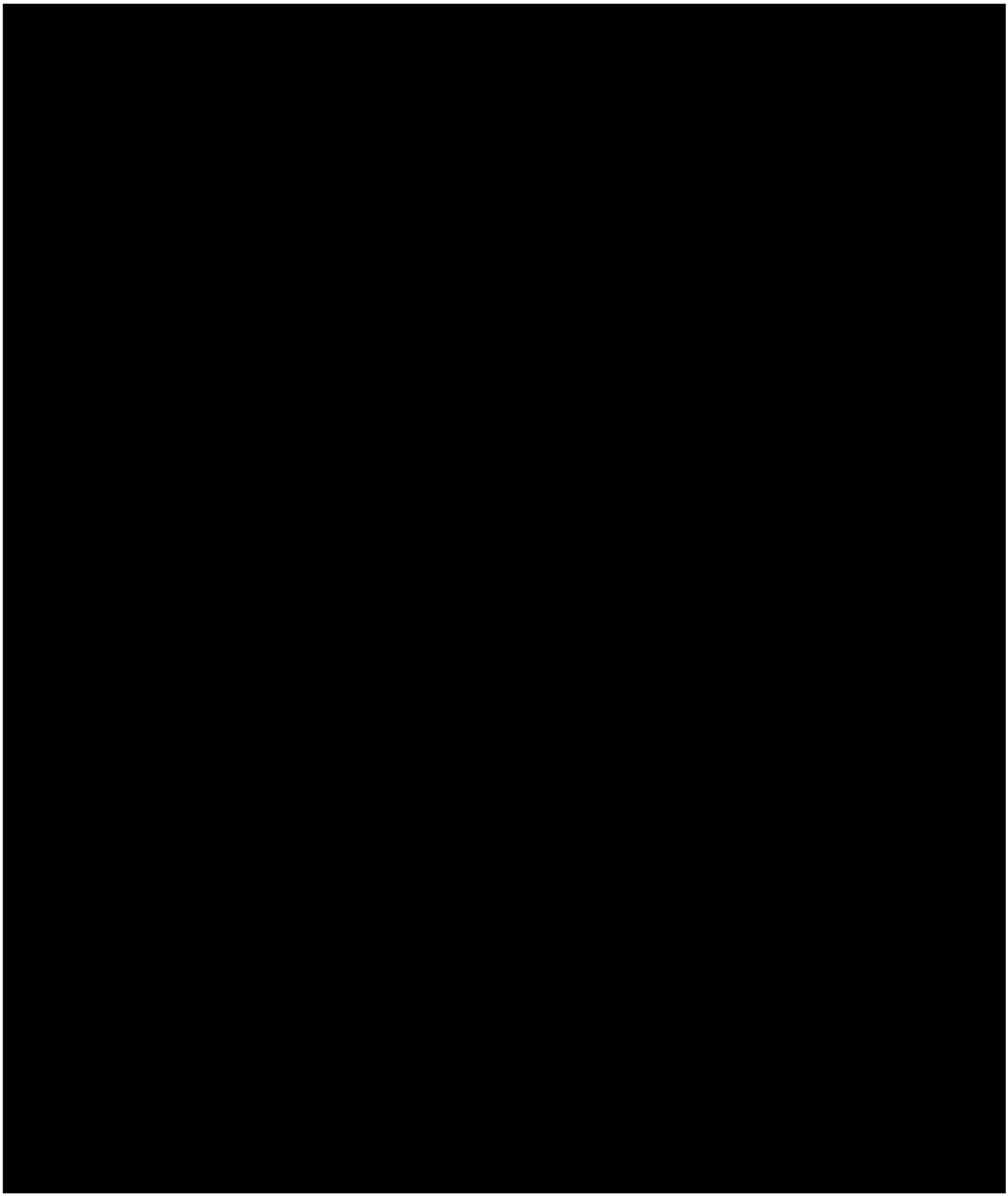
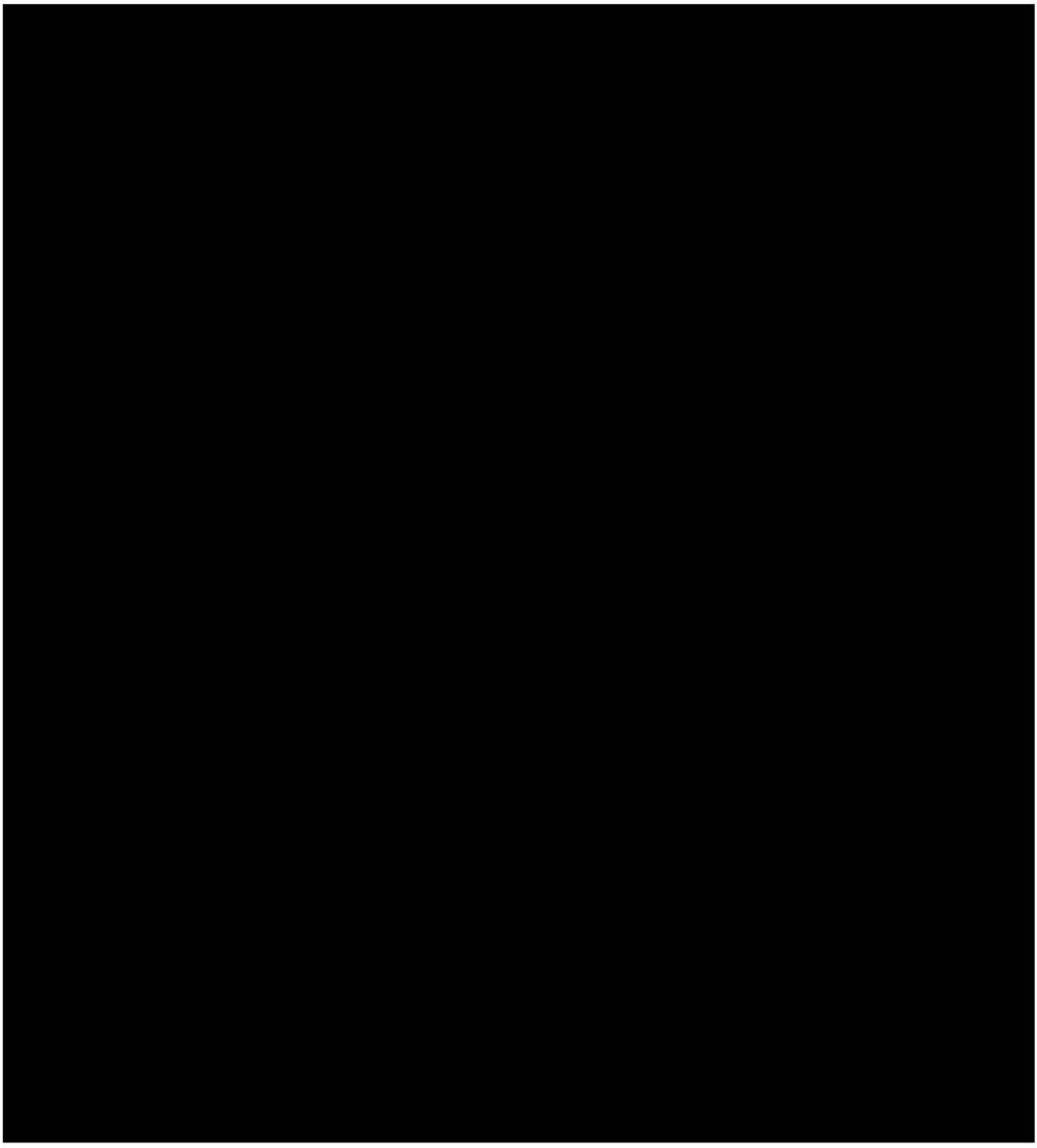










Attachment B: Assessment of Whether a Citizen Suit Would be Successful

[redacted]

Attachment D: Aerial Photographs

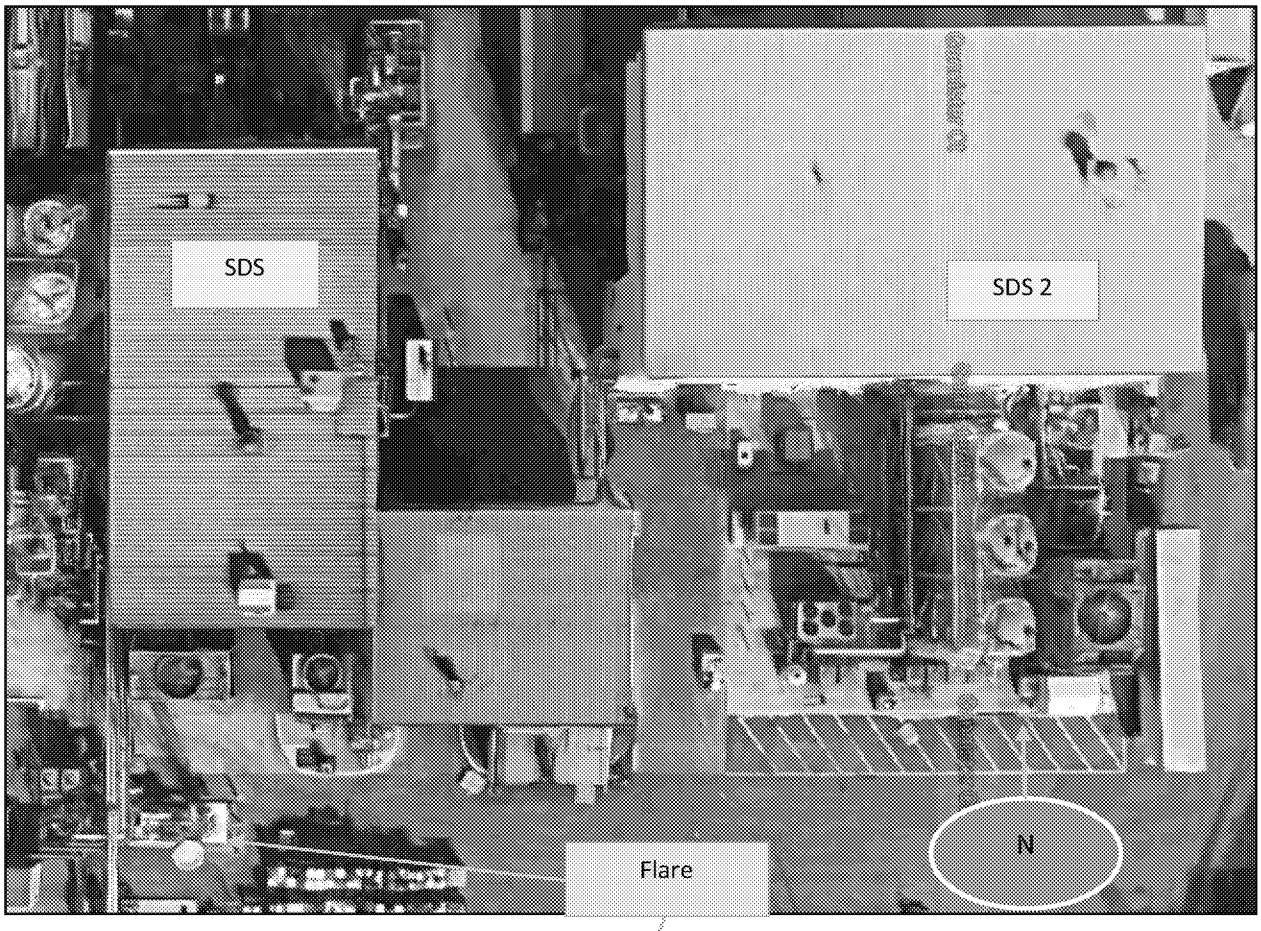
Aerial Photos of Tradebe SDS

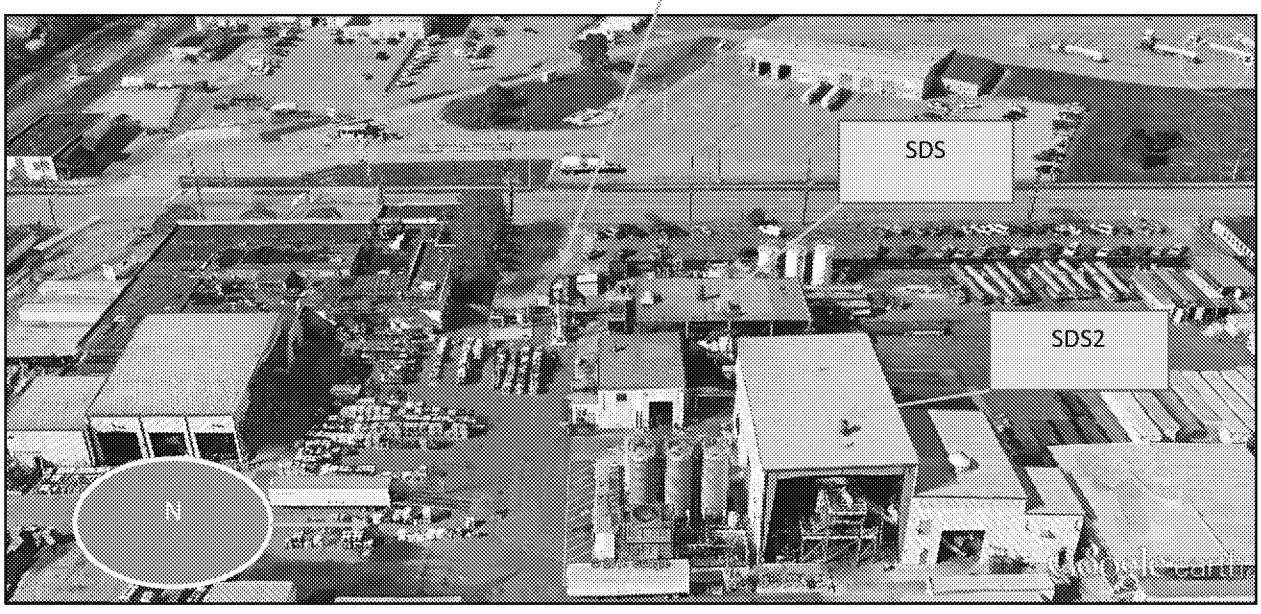
The following aerial photos – orientated North (top photo) and West (bottom photo) – of the Tradebe-East Chicago facility focus on the two solids distillation system buildings, SDS and SDS2.

Incoming containers to SDS (also referred to as SDS1 or SDS I) are staged south of the SDS building, a two-story steel and aluminum structure. Containers are transported by forklift to the feed hopper.

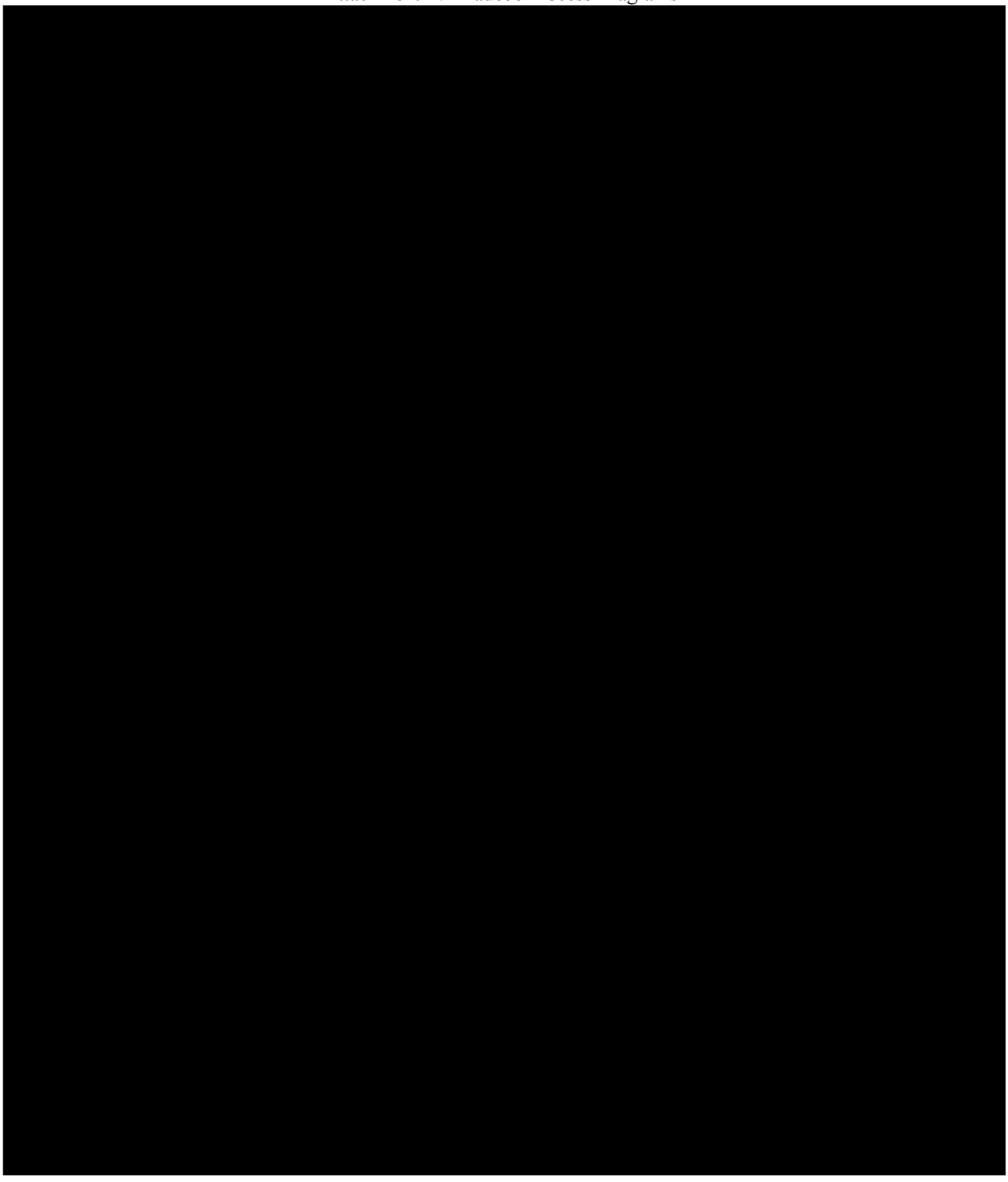
Incoming containers to SDS2 (also referred to as SDS II) are staged on a storage pad under a roof located to the north of the SDS2 building. The bottom photo, below, shows this storage pad to the right (North) of the SDS2 building, which is a three-story steel and aluminum structure. Containers are likewise transported to the SDS2 feed hopper by forklift.

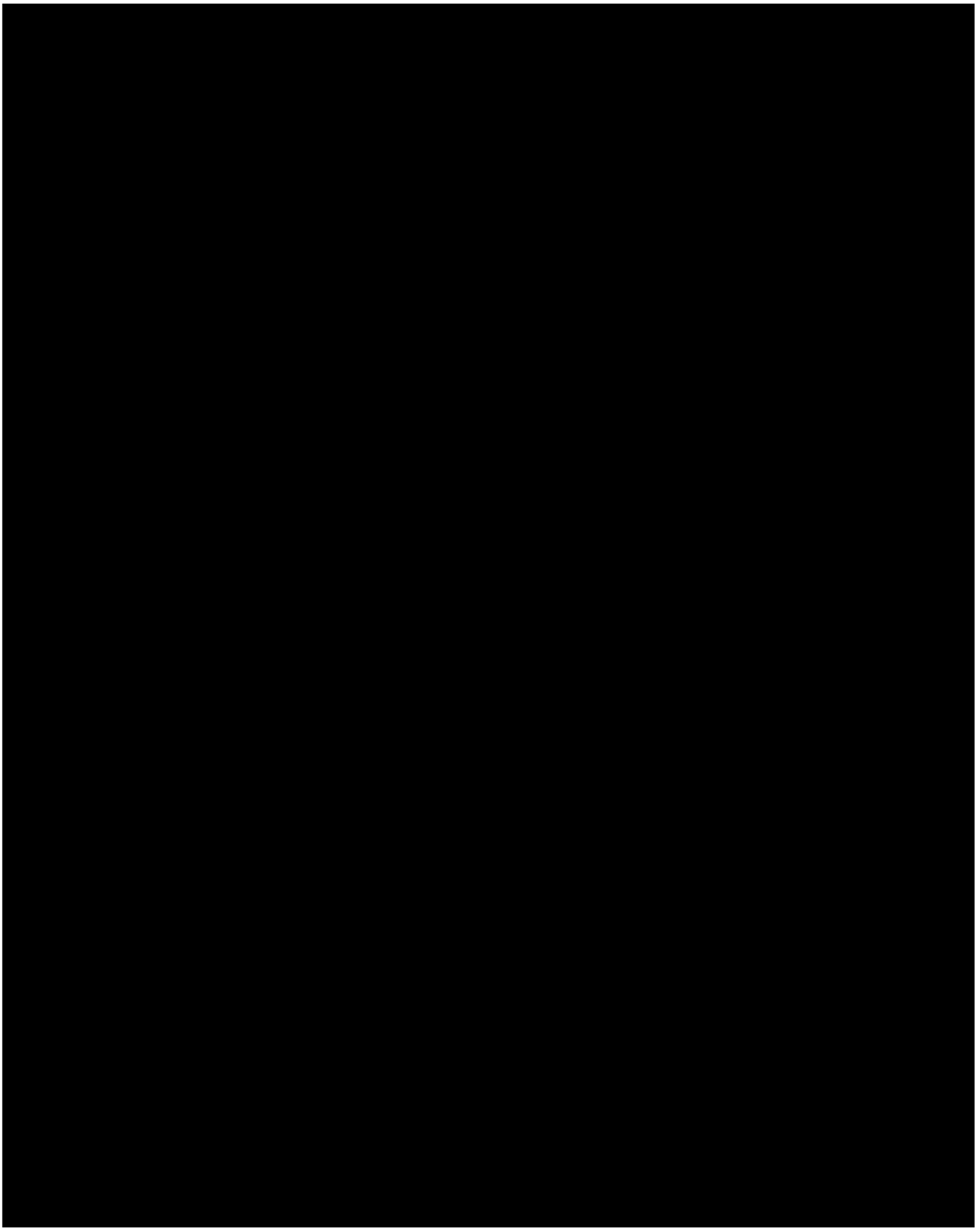
The flare is readily visible from Kennedy Avenue, which borders the facility on the west.

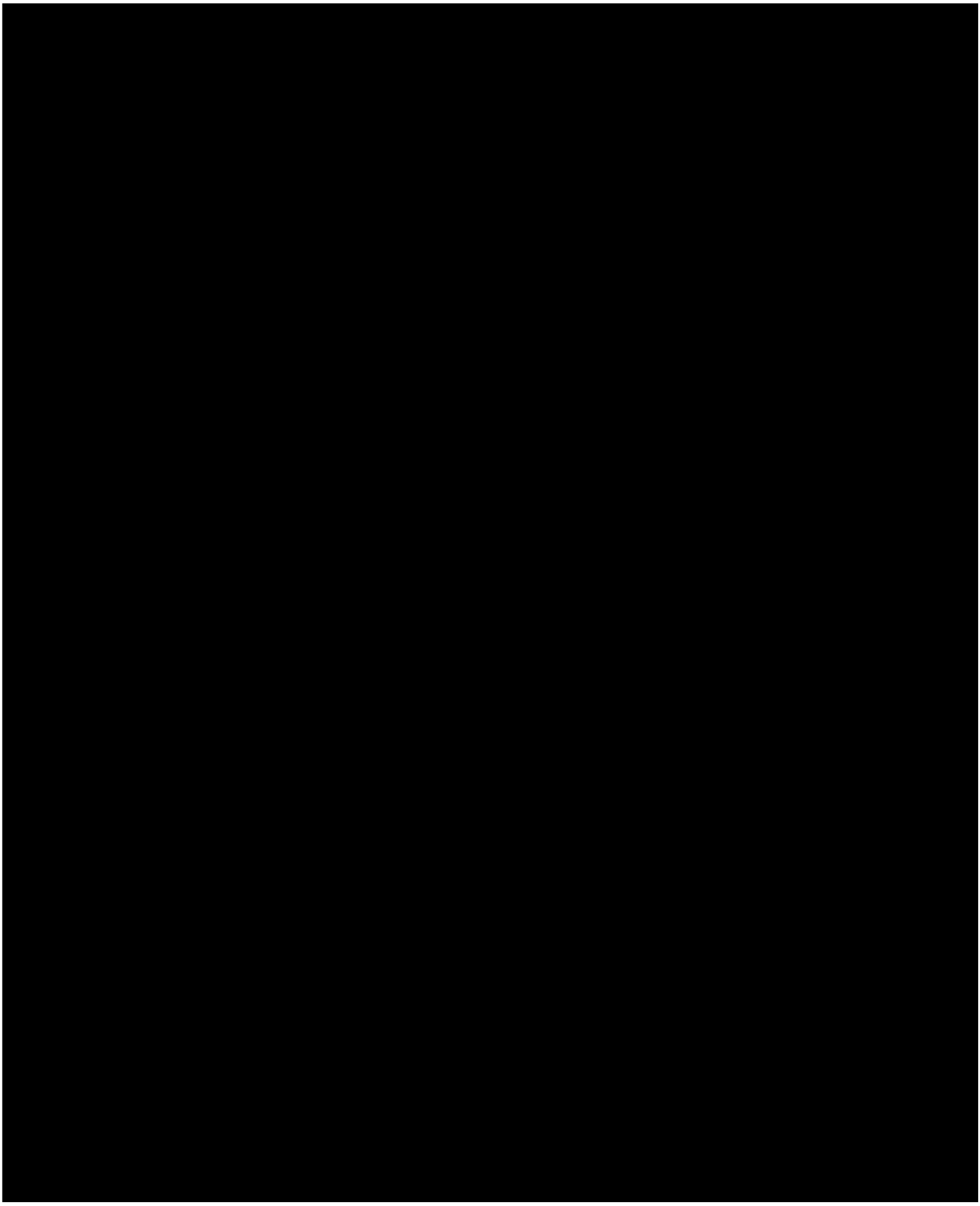

SDS
SDS 2
Flare
N


SDS
SDS2
N

Attachment E: Tradebe Process Diagrams







UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 Ross Avenue
Dallas, Texas 75202-2733

2 MAY 2016

Mr. J.D. Head
Fritz, Byrne, Head & Fitzpatrick, PLLC
221 West 6th Street
Suite 960
Austin, Texas 7870 I

Dear Mr. Head:

Thank you for your October 30, 2015 letter requesting clarification of the hazardous waste regulatory standards for thermal desorption units (TDUs) installed at RCRA treatment, storage, and disposal facilities (TSDFs). I apologize for the delay in responding to your request. In your scenario, the TDU reclaims oil from oil bearing hazardous wastes generated by petroleum refining, production, or transportation practices. You describe a TDU as a device that heats solid material to vaporize, remove, and separate organic constituent materials from solids. In the scenario you describe at a TSDF, the separated organic constituents are typically condensed and recovered as a liquid oil. The TDU process also generates a vent gas after the condensing stream.

Your inquiry also references 40 C.F.R. § 261.6(a)(3)(iv)(C) [1], which provides that:

Oil reclaimed from oil-bearing hazardous waste from petroleum refining, production, or transportation practices, which reclaimed oil is burned as a fuel without reintroduction to a refining process, so long as the used oil specification under 40 C.F.R. § 279. 11 is not subject to regulation under 40 C.F.R. Parts 262 - 268, 270, or 40 C.F.R. Part 124, and is not subject to the notification requirements of Section 3010 of RCRA.

If the above conditions are met, then the reclaimed oil can be burned as a non-hazardous fuel. If the oil-bearing hazardous waste is not from petroleum refining, production, or transportation practices, then the reclaimed oil is subject to RCRA regulation.

If a TDU combusts all or a portion of the vent gas, combustion of the TDU vent gas from RCRA hazardous waste or recyclable materials [40 C.F.R. § 261.6(a)(l)] is considered thermal treatment that is regulated by RCRA. The material being treated (oil-bearing hazardous waste) is already a hazardous waste. Heating hazardous wastes lo a gaseous state is subject to regulation under RCRA as treatment of hazardous waste, and thermal treatment after a material becomes a hazardous waste is fully regulated under RCRA. 54 Fed. Reg. 50968, 50973 (December 11, 1989). Thus, thermal treatment of the vent gas requires a RCRA permit.

[1] Since you did not reference a specific State in which your client may operate a TDU, this letter cites to the applicable federal regulations. If the State has an authorized RCRA program, the corresponding state regulation would be applicable.

If the vent gas is combusted in the combustion chamber of the TDU, then a permit under 40 C.F.R. Part 264, Subpart 0 is required, because the TDU would meet the definition of incinerator in 40 C.F.R. § 260.10 (an enclosed device that uses controlled flame combustion). If, on the other hand, the vent gas is vented to and combusted in a thermal oxidizing unit (TOU), the permitting authority may be able to permit the entire unit (TDU and TOU) as a miscellaneous unit under 40 C.F.R. Part 264, Subpart X. A RCRA permit would be required even if the facility is operating as a RCRA exempt recycling activity under 40 C.F.R. §261.6(a)(3)(iv)(C). If the permitting authority decides to issue a 40 C.F.R. Part 264, Subpart X permit, the permitting authority is required to include in the permit requirements from 40 C.F.R. Part 264, Subparts I through 0, AA, BB, and CC, 40 C.F.R. Part 270, 40 C.F.R. Part 63, Subpart EEE, and 40 C.F.R. Part 146 that are appropriate for the miscellaneous unit being permitted as required in 40 C.F.R. §264.6001. The decisions as to what appropriate requirements would be included in the permit would be left to the permitting authority. However, EPA would expect that the permit conditions would be similar to those set forth in the enclosed Consent Agreement and Final Order, In Re: US Ecology Texas, Inc. and TD*X Associates, LP, EPA Docket Nos. RCRA-06-2012-0936 and RCRA-06-2012-0937, filed October 4, 2012.

If you have any questions, please feel free to contact Guy Tidmore of my staff at (214) 665-3142 or via e-mail at tidmore.guy@epa.gov.

Sincerely,

John Blevins
Director

Enforcement Division

Enclosure

Cc: Penny Wilson, ADEQ
Lourdes Iturralde, LDEQ
John Kieling, NMED
Mike Stickney, ODEQ
James Gradney, TCEQ

[redacted]

Attachment I: 2 Giant Cement Memos Regarding Multiple Treatment Units in Series (Second Letter was a Clarification)

9498.1992(01)

United States Environmental Protection Agency Washington, D.C. 20460
Office of Solid Waste and Emergency Response August 11, 1992

MEMORANDUM

SUBJECT: Combined Operation of the Resource Recovery Kilns and Cement Kilns at Giant Cement Company, Harleyville, South Carolina

FROM: Jeffery D. Denit, Deputy Director Office of Solid Waste

TO: Donald J. Guinyard, Director Waste Management Division Region IV

This is in response to your January 8, 1992, memorandum requesting review of the tentative Regional decisions on the issues presented in Giant Cement Company's October 1, 1991, position paper. Following are the OSW interpretations on each of the four issues raised.

Issue 1: Regulatory Status of the Cement Kilns

We agree with your interpretation that the "resource recovery kiln"/cement kiln systems should be regulated under the BIF (boiler and industrial furnace) standards, if operated in the manner described in your memorandum and Giant's position paper. (That is, each resource recovery kiln burns contaminated soils, and possibly other solid wastes, and both the treated solids and the off-gas are fed into a cement kiln.) For systems of two or more hazardous waste treatment units in series, our general guideline is that a case-by-case determination of how the overall system is classified and what standards and permit conditions are applied should be based on the dominant design, operating, feed, and emissions characteristics of the system, and the most specific standards applicable to that type of system.

In the Giant situation, it appears that the resource recovery kiln and the cement kiln operate as part of one overall system. The BIF standards would be applicable because they are the most specific standards applicable to this system. Portions of the BIF standards are specifically tailored to the operating characteristics of cement kilns. For example, the BIF rule contains provisions related to reading of hazardous waste at points other than the hot end of the kiln and includes hydrocarbon standards which take into account organics being volatilized from raw materials. These provisions may relate to the Giant system, but are not addressed in the incinerator regulations. Of course, additional operating conditions would likely need to be added to address feed rates, temperatures, etc., in the desorber.

You also state that Giant argues that off-gases from the resource recovery kilns fed to the cement kiln cannot be classified as a hazardous waste. We agree with the

Regions' interpretation that this distinction is irrelevant when determining our regulatory authority over the gases. Off-gases from the resource recovery kilns are regulated under RCRA since they originate from treatment of hazardous waste.

Issue 2: Carbon Monoxide Testing

As previously stated, we agree with your position that the cement kilns and resource recovery kilns operating in series should be regulated under the BIF regulations. Therefore, any approach provided under the BIF regulations to establish a carbon monoxide limit may be considered, including the alternate hydrocarbon approach.

Issue 3: Land Disposal Testing

You raised the issue of how treatment in the cement kiln of the solids and the gases discharged from the resource recovery kilns affect whether the product from the cement kiln is considered to be a waste-derived product.

Solids

We agree with most of your interpretation regarding the effect of treating solids on the classification of the product, with one clarification noted below. Environmental media (e.g., soils, groundwater) contaminated with listed hazardous waste must be managed as if they were hazardous wastes until they no longer contain the listed waste, or are delisted. The Regions or authorized States may determine, on a case-specific basis, at what levels contaminated environmental media no longer contain the hazardous waste. As discussed in the attached June 19, 1989, letter from Jonathan Cannon to Thomas Jorling, these levels may be health-based levels derived by assuming direct human exposure. We would like to clarify, however, that this determination must consider all Appendix VIII constituents present in the listed waste, rather than just those constituents for which the waste was listed, as stated in your memo.

Although Giant's situation is complicated by the fact that there are two units combined into one system, we believe it may be possible to determine whether the soils leaving the resource recovery kiln contain hazardous waste prior to entering the cement kiln. In order for this determination to be meaningful and enforceable, it will be necessary to develop a sampling and analysis regime that must be adhered to by the facility in order to ensure that the media no longer contain hazardous waste after treatment in the resource recovery kiln. This determination will be more difficult and complicated if the facility accepts media with a wide variety of waste codes, in varying proportions and concentrations. It is not clear whether Giant plans to treat only contaminated media originating from a limited set of waste codes, or whether they plan to burn a wide variety of waste codes including actual wastes (see footnote 1), in the resource recovery kiln. We are concerned that under the Part A already submitted, there is no limitation on the variety of wastes and waste codes which Giant could accept and treat.

The Region or State can use existing policy memoranda regarding the "contained-in" policy as guidance in setting the appropriate health-based levels to indicate when the soils no longer contain hazardous waste. However, there must be an enforceable mechanism which specifies the conditions necessary for the facility to demonstrate that the soil meets these levels on a regular basis, similar to the delisting program. In the future, we expect that the Hazardous Waste Identification Rule (HWIR) may provide quantitative criteria and specific sampling and analysis requirements that could be applied to this situation. In setting quantitative criteria, you may in the interim use generally available Agency numbers, such as the soil

levels in the proposed Subpart S corrective action rule (55 FR 30798, July 27, 1990) or numbers derived from IRIS through the use of standard exposure assumptions.

If it is determined that treated environmental media from the resource recovery kilns no longer contain hazardous wastes, then the "decontaminated" solids need not be managed as a hazardous waste, and feeding these materials to the cement kiln would not cause the cement product to be a "waste-derived product" subject to the provisions of §266.20(b).

Gases

Although, as stated earlier, the off-gas from the resource recovery kiln is regulated, our interpretation is that feeding the off-gas into the Giant cement kiln would not cause the cement produced in the kiln to be subject to the §266.20(b) product criteria.

Generally, when listed hazardous waste is burned in a cement kiln for any purpose other than solely for energy recovery (i.e., as an ingredient or for destruction) and the product is then placed on the land, under §261.2(c)(1)(i)(B) and the derived-from rule (§261.3(c)(2)(i)), the cement product is a solid and hazardous waste and is subject to §266.20 (see footnote 2). However, as indicated in the preamble to the first third land disposal restrictions rule, when listed hazardous waste is burned in an industrial furnace for energy recovery, the product produced is not subject to §266.20 because the Agency concluded that due to the process chemistry involved the constituents in the fuel do not partition to the product and therefore the product does not "contain" the hazardous waste (see 53 FR 31197, August 17, 1988).

In the Giant case, because the material fed to the cement kiln is a gas, and because it is fed similarly to fuels (i.e., to the hot end of the kiln), we believe that what is occurring in the Giant system is more analogous to burning of waste fuels than it is to what normally occurs when materials are burned for destruction in a cement kiln. Specifically, it is expected that the feed rate of hazardous constituents contributed by the gas stream would be lower than that contributed by the hazardous waste fuel, and that the hazardous constituents in the gas stream are no more likely to be contained in the cement product than those in the hazardous waste fuel. Thus, unless the facts indicate otherwise, as with hazardous waste fuels we believe that burning of the off-gas stream in the cement kiln should not cause the cement product to be a waste-derived product subject to the §266.20(b) criteria because the product is not expected to contain the hazardous waste. Issue 4: Regulatory Status of Clinker

If, based on the factors discussed under "Solids" in Issue 3, it is determined that the cement kiln product is a waste derived product, §266.20(b) would apply. Under §266.20(b), hazardous waste-derived products used in a manner that constitutes disposal are not presently subject to regulation if these wastes have undergone a chemical reaction so as to become inseparable by physical means, and if such products meet applicable land disposal restrictions treatment standards in Subpart D of Part 268 (or applicable prohibition levels in §268.32 or RCRA Section 3004(d) where no treatment standards exist). You proposed that any analysis required under §266.20(b) be conducted on the commercially sold cement, rather than the clinker. Section 266.20 states that the product must meet the above criteria. In most cases the cement is the final product which is sold to the consumer and placed on the land, and this material should meet the applicable land disposal restriction requirements.

However, in some situations it may be preferable and acceptable to test the clinker to determine whether the cement would meet the §266.20(b) criteria. We

understand there may be cases where a cement kiln facility sells its clinker to another facility which grinds and mixes it with gypsum to produce cement. In such a case, it may be preferable to test the clinker before it goes off-site. Further, waste-derived products which do not meet the criteria in §266.20(b) must be managed as hazardous waste. Thus, if the clinker is not determined to meet these criteria prior to grinding, clinker storage could be subject to RCRA permitting. Finally, in cases where demonstration of compliance with the 266.20(b) criteria (applicable land disposal restrictions) would include testing using the Toxicity Characteristic Leaching Procedure, we believe that the particle size reduction step of the procedure would ensure that results for the clinker would be representative of the cement's conformance with these criteria, provided the cement contains no hazardous waste-derived materials other than the ground clinker. For these reasons, we believe it would be reasonable to consider the clinker to be the facility's product, and to allow the §266.20(b) criteria to be demonstrated on the clinker.

In addition, as you stated, 40 CFR 268.7(b)(7) requires that for each shipment of waste-derived product to a receiving facility, the waste-derived product producer must submit to the Regional Administrator a certification as described in §268.7(b)(5) and a notice which includes the information listed in §268.7(b)(4) (except the manifest number). The producer must also keep records of the name and location of each entity receiving the hazardous waste-derived product. It is not necessary for the producer to send the certification notice to the receiving facility.

Finally, please note that the derived-from and mixture rules were reinstated on an interim basis (effective until April 28, 1993) pending notice and comment on those provisions (57 FR 7628 7633, March 3, 1992). In addition, as illustrated by the Giant case, the management of hazardous waste in cement kilns involves many complex and difficult issues. We are currently beginning a study of these issues as part of our RCRA Reform Initiative for which we will be gathering a wide range of data including information on industry practices. I anticipate that discussion of these issues will continue as we progress with the study and I welcome your thoughts and ideas.

We commend Region IV for its thorough analysis of these complex issues. If you have further questions, feel free to contact Sonya Sasseville at (202) 260-3132.

cc: Incinerator Permit Writers' Workgroup; Dev Barnes; Matt Hale; Matt Straus; Elizabeth Cotsworth; Dave Bussard; James Michael; Charlotte Mooney; Steve Silverman

1 It should be noted that if listed hazardous wastes (rather than media contaminated with listed wastes) are treated in the resource recovery kilns, the recovery kiln residues would be hazardous waste pursuant to the derived-from rule.

2 Such hazardous waste-derived products used in a manner that constitutes disposal are not presently subject to regulation if they meet the criteria under §266.20(b).

CLARIFICATION REGARDING SINGLE EMISSION POINT, MULTI-DEVICE COMBUSTION FACILITIES

United States Environmental Protection Agency
Washington, D.C. 20460
Office of Solid Waste and Emergency Response

July 29, 1994

MEMORANDUM

SUBJECT: Clarification Regarding Single Emission Point, Multi-Device Combustion Facilities

FROM: Michael H. Shapiro, Director
Office of Solid Waste

TO: Allyn M. Davis, Director Hazardous Waste
Management Division, Region VI

Walter L. Sutton, Jr., Acting Regional Counsel
Office of Regional Counsel, Region VI

This memorandum is in response to your July 8, 1994, memorandum requesting clarification of a prior headquarters opinion regarding the Giant Cement Company in Harleyville, South Carolina. I understand that the recent court ruling on Marine Shale Processors has raised some questions about EPA's interpretation of the regulatory status of multi-device combustion facilities. In particular, we think that our August 11, 1992 memorandum regarding Giant Cement and Region IV's subsequent letter of November 24, 1993 was misapplied. I thus agree with Region VI that it is important to clarify this issue so that consistent determinations can be made nationwide.

This memorandum will clarify how the RCRA regulations apply to combustion devices (incinerators, industrial furnaces, and boilers) at facilities in which more than one of these devices are connected and in which the emissions from the connected devices emanate from a single emissions point. I believe the confusion arose because there are two basic issues that are encountered when applying the regulations to units in series: 1) what emission controls and operating conditions are technically appropriate and will be fully protective of human health and the environment; and 2) what legal categories do the units fall into, for the purpose of determining regulatory coverage, eligibility for interim status, need for permit modifications, etc. The Giant memo addressed only the first issue, but appears to have been misinterpreted to apply to the second issue also. Following interpretation of the two issues.

Emission Controls

Giant Cement operated a hazardous waste-fired cement kiln and a number of "resource recovery kilns" burning contaminated soil. Both the off-gas and the treated-solids from the resource recovery kilns were fed into the cement kiln. The resource recovery kilns were interim status incinerators.

The Giant memo referenced above addressed only the question of what types of operational and emissions controls are appropriate to impose on connected devices with a single emissions point, by stating: "For systems of two or more hazardous waste treatment units in series, our general guideline is that a case-by-case determination of how the overall system is classified and what standards and permit conditions are applied should be based on the dominant design, operating, feed, and emissions characteristics of the system, and the most specific standards applicable to that type of system." We still believe this type of flexible approach is important because of the difficulty, from an engineering standpoint, of applying two sets of potentially conflicting emission standards (e.g., the Part 264 Subpart O incinerator standards and the Part 266 Subpart H boiler and industrial furnace (BIF) standards) to a single emissions point on a series of devices which are connected.

In performing a technical evaluation of what standards should be applied to a group of units in series, it will usually be necessary to look at the reasoning behind the regulatory requirements, as expressed in preambles and guidance documents, and not simply at the regulatory requirements. Based on this type of evaluation, if two sets of emissions standards fit equally well from a technical standpoint, preference should be given to the more stringent standards. If not, the standards which are most-appropriate technically, considering their regulatory rationale, should be applied. In addition, the permit writer should consider whether additional conditions beyond the regulations are necessary to tailor the permit to the specific system and site in order to protect human health and the environment (through use of the RCRA 3005(c)(3) omnibus authority).

It should also be noted that there may be cases, such as where two or more combustion devices operate in parallel and share only a common stack, in which the determination of what standards to apply is straightforward (i.e., unit by unit). The principal remaining issue in this situation is how to do the testing to determine whether each unit is meeting the standards.

Permitting/Interim status Determination

The above determination of the most technically appropriate and protective emissions controls to apply in the permit for interconnected devices must be distinguished from the classification of the devices for purposes of determining interim status eligibility and other issues. Because Giant had already attained interim status separately for its "resource recovery kilns" as incinerators and for its cement kiln as an industrial furnace, the August 1992 memorandum did not address nor need to address the classification of these devices for such purposes.

For the same reason, Region IV's November 24, 1993 letter to Giant Cement indicating that the resource recovery kilns would now be subject to hazardous waste incinerator emission standards because the combusted contaminated soil from those units was being disposed and not put into the cement kiln, dealt only with the issue of what emission standards would apply to these kilns. These earlier documents addressed the only question asked, which is what emission standards should apply.

In recognition of the practical difficulties of applying more than one set of standards to a single emission point, these documents discussed the criteria to be used in determining what emission standards should apply to that point. Under the principles discussed in these documents, EPA may determine, for example, that the emissions from a process train involving an incinerator and a cement kiln are most appropriately regulated under the emissions standards applicable to cement kilns. This does not mean that the incinerator "becomes" a cement kiln; it simply means that the common emission point should be regulated under the cement kiln standards.

These documents did not intend to suggest that the individual units in a process train lose their unit identities. The separate identities of the individual units in a process train is relevant in the context of facilities seeking to obtain interim status, among other situations. Under EPA regulations, a facility that is "in existence" on the effective date of a statutory or regulatory change that subjects it to the requirement to obtain a RCRA permit may obtain interim status by submitting Part A of its permit application and complying with statutory

notification requirements. 40 CFR 270.70(a). A unit that is already subject to the permit requirement cannot obtain interim status upon the promulgation of regulations bringing a different type of unit into the RCRA system. See 56 FR at 7142 (February 21, 1991) (aggregate kiln burning hazardous waste for destruction and thereby subject to the rules for incinerators is not newly eligible for interim status when BIF rules are promulgated).

In reviewing a Part A application form filed by a facility seeking interim status following the regulation of a new type of unit, EPA evaluates whether the unit (or units) identified on the form were of the newly regulated type. In performing this evaluation, EPA-would compare the unit with the unit-definitions set forth in its regulations, irrespective of whether the unit was self-contained or part of a process train. In particular, if the unit and other units shared a common emission point, the regulatory emission standards determined to be most technically appropriate for that point would be irrelevant to the identity of the unit in question.

The pertinent definitions for combustion devices are the definitions of "boiler", "industrial furnace", and "incinerator" in 260.10. The definition of boiler is based on unit design. Industrial furnaces are an enumerated list of devices that are parts of manufacturing processes and incinerators are devices which are not boilers or industrial furnaces. The list of industrial furnaces is not written in terms of device systems; it describes particular devices: "cement kilns", "aggregate kilns", "halogen acid furnaces", etc. Consequently, a device would normally need to fit one of these descriptions to be an industrial furnace.

The Agency's interpretation is that the list of industrial furnaces applies on a device-by-device basis whenever the devices are combusting separate (i.e., not from another device in the series) hazardous wastes. The only exception would be where the Agency has indicated unequivocally (normally in the context of a notice-and-comment rulemaking) that the definition of that industrial furnace type applies to multiple devices. The only device for which the Agency has done so are cement kiln precalciners, which EPA agrees are invariably operated as part of one cement-manufacturing operation, even if the precalciner is separately fired with hazardous waste (see footnote 1). See, e.g., 54 FR at 43761 (Oct. 26, 1989). The Agency did not consider the effect of emissions from other connected hazardous waste units when it promulgated the BIF rule.

The interpretation that the industrial furnace definition is to be read to apply to each combustion device burning separate hazardous waste is consistent with the literal language of the industrial furnace definition. It is also consistent with statutory provisions requiring that hazardous waste combustion can only be performed pursuant to stringent regulatory control, RCRA sections 3004(o)(1)(B) and 3004(q), and that hazardous waste be properly managed in the first instance. RCRA section 1003(a)(5). These goals would be circumvented if hazardous waste-fired units were simply considered to be part of the industrial furnace. Before the BIF rules became effective, for example, this would mean that the additional unit -- an incinerator -- could burn hazardous waste without any regulatory control.

This interpretation covers the case of two hazardous waste fired devices. If the additional device is not hazardous waste fired, then it could be considered to be part of the industrial furnace. The Agency has in fact indicated in explanatory preambles and other interpretive documents that industrial furnaces can include certain integrated components that pretreat materials or assist in air pollution control. See, e.g., 56 FR at 42598 (August 27, 1991). So long as these devices are not burning separate hazardous wastes, they do not raise the core RCRA concerns discussed above, and can accordingly be regulated as part of the industrial furnace (see footnote 2).

Example

To illustrate the application of the above principles to combustion units in series, consider the following example. The owner/operator of an interim status cement kiln chooses to add an afterburner to help achieve control of PIC emissions (see 57 FR at 38561 (Aug. 27, 1991) where EPA suggested this course as a means of

reducing organic emissions) and further chooses to fire the afterburner with hazardous waste. The hazardous-waste fired afterburner is not a cement kiln, but rather is a separate device: an incinerator (see footnote 3). It is not on the list of industrial furnaces, and it is engaged in the type of activity -- hazardous waste combustion -- for which regulatory controls are mandated. Thus, the afterburner is ineligible for interim status as part of the cement kiln. The facility would have to apply for a change during interim status under 270.72(a)(3) for addition of a process and receive Director approval based on meeting the criteria in that section.

However, in the same example, if the cement kiln were to add an afterburner which is not hazardous waste-fired, the Agency would not view this action as adding an incinerator. By not separately combusting hazardous waste, the hypothetical afterburner is not separately engaged in hazardous waste treatment. Rather, it is simply treating emissions from a hazardous waste treatment device, and so is considered part of that device. In such a case no regulatory approval under the change during interim status provisions is needed to add the device, and the afterburner becomes part of the interim status cement kiln.

I hope this has clarified the issue of how to address interconnected combustion devices. If you have further questions, feel free to call me, or have your staff contact Sonya Sasseville at (703) 308-8648.

cc: Matt Straus, Fred Chanania, Dev Barnes, Matt Hale, Frank McAlister, Larry Starfield, Steve Silverman, Terry Sykes, Laurie King, Waste Combustion Permit Writers' Workgroup, Subpart X Permit Writers' Workgroup

1) While the Agency may have identified other devices which do not separately fire hazardous waste as part of an industrial furnace, precalciners are the only hazardous waste-fired devices for which such an interpretation has been made.
2) This is not intended to imply that the presence of an afterburner not separately fired with hazardous waste on a non-controlled flame device never affects the regulatory classification of that device. In the case of plasma arc and infrared units, the Agency has classified those devices as incinerators when they have afterburners (considering the plasma arc or infrared device plus the afterburner to be one unit) and as Subpart X devices when they do not. (See 56 FR 7204, 57 FR 38562, and incinerator definition at 40 CFR 260.10.) It is expected that there will be other situations in the future where the Agency will be developing separate definitions for units in series. This will be done through rulemaking, as appropriate.
3) EPA officials have in fact given this advice to cement kilns contemplating adding afterburners to assist in meeting emission controls for products of incomplete combustion